

### ABSTRACT

The present invention relates to potted exchange devices including hollow conduits and or hollow porous membranes wherein the housing includes recessed channels or grooves. The recessed channels or grooves are filled by the potting material during the potting process and form a unitary end structure with the potting material. The grooves or channels formed on the inside of the housing maintains the integrity of the potting with the housing under a wide range of mechanical and thermal conditions.